A Promising Start For A New Population Of *Parnassia caroliniana*

Longleaf Pine Restoration. Thursday, 4:00pm - 5:45pm

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Parnassia caroliniana Michx. is a rare forb of wet longleaf pine flatwoods and savannas from North Carolina to Florida. In this study, we attempted to start a new population of this rare species in the Francis Marion National Forest, north of Charleston, South Carolina. The method involved collecting seeds from wild plants, germinating the seeds, growing seedlings in an outdoor nursery, and out planting seedlings into the field site. Seed germination conditions were varied experimentally to test for effects of these factors on germination. Overall seed germination was 23.6%, out of a total sample size of 3,990. Density and spacing treatments had little effect, but seeds covered with a thin layer of soil had significantly higher germination rates than uncovered seeds (34% vs. 20%). Most seedlings emerged in February and March. Earlier emerging seedlings had higher initial mortality, but superior long-term survival. After one growing season in the nursery, 395 seedlings were outplanted in November 1995 into eight subplots in savanna microhabitats within long-term experimental fire treatment plots which had been burned within the previous year. Eighty five percent of out planted seedlings re-emerged the following spring, and 92% of these survived their first growing season in the field. All subpopulations increased greatly in leaf numbers and surface area during the 1996 growing season (percentage increases ranged from 80% to 590%). One fire treatment plot, containing 88 plants, was burned in early spring 1997. Two weeks after this fire, 82% of these plants had resprouted. It appears that our new population of *Parnassia caroliniana* is off to a promising beginning.

seedlings appears generally to be more effective than introducing seeds for establishing populations of new species. However, seed introductions provide the possibility of selection for superior genotypes.

Florida Wetlands Bank Trending Towards Success

Wetland Restoration in Florida, Thursday, 10:15am - 12:15pm

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The Florida Wetlandsbank (FW), the first private/public permitted mitigation bank in Florida, offers a preferred method of wetland protection and a substantial increase in ecological value to the community and the region as a whole. The mitigation bank allows for property owners and/or developers to provide wetlands mitigation in a large, contiguous area, as opposed to a small, dispersed area. This offers an increased ecological value to the public and flexibility of development to the property owner.

The project consists of ±341.56 acres and it is located in the City of Pembroke Pines, Florida. The land is owned by the City of Pembroke Pines and it is leased to a group of private investors. This public and private partnership allows for an increase in ecological value and an economically feasible project. The site, in it's original condition, consisted of heavily disturbed wetlands with primarily exotic vegetation such as *Melaleuca*. As part of the restoration and enhancement efforts, the wetlands are currently being transformed into a high quality, historic Everglade wetlands ecosystem.

Diverse wetland and upland habitats have been designed to be utilized by wildlife. In addition, the property will include a passive park, canoe trails, and wildlife observation platforms. At this time, FW is approximately three-quarters (3/4) constructed and it is expected that the remaining of the project will be completed soon. Monitoring and reporting on desirable plant species, wildlife usage, exotic vegetation, hydrological and soil conditions have been undertaken and the wetland mitigation success criteria established by the permitting agencies have been met. The FW is reflecting a high quality historic Everglade wetlands ecosystem which will thrive for generations to come.

Using Local Models To Establish Targets For Restoration: Examples From Florida Sandhill Communities

Success Criteria And Monitoring, Saturday, 4:00pm - 5:45pm

Doria Gordon[1], Gregory S. Seamon[2], Beatriz Pace-Aldana[1], Louis Provencher[3], Jill H. Fisher[1], and Jeffrey L. Hardesty[1].
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Assessment of restoration needs and success requires articulation of the characteristics of the goal community. While the conceptual model of a community type may vary little over the geographic distribution of that community, allowing common definition of the community across its range, local environmental and biological conditions often alter the more specific community characteristics at a site. Additionally, where the historical management of sites has substantially altered factors such as soil, elevation, hydrology, and species composition, the restoration trajectory may be substantially different in either time or potential community composition from the original community. Model sites are therefore necessary to provide quantitative and qualitative data for the setting of quantitative objectives for restoration. We discuss three examples of sandhill restoration monitoring from central to northwest Florida, where density of longleaf pine, and cover or density of over story trees and understory perennial grasses, forbs, woody plants, litter and bare ground have been quantified. Ranges for these community components from local sites are used in quantification of objectives for sites under various restoration activities including prescribed fire, planting, herbicide application, and tree removal. Evaluation of restoration success is based on the trajectory of measurements in the restoration sites relative to the model sites, which are also monitored to detect short- and long-term trends in the variables and to re-evaluate the ranges in the objectives. Development of this method has provided both a means of evaluating the effects of management and important information about our overall community concept and the model sites selected.

Using Tropical Forests Or Loosing Tropical Forest: Traditional And Non-Traditional Forest Uses In The Peruvian Amazon, Implications For The Future

Tropical Forest Restoration, Saturday, 1:45pm - 3:30pm

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Indigenous peoples are widely recognized as utilizing a wide range of forest products in a sustainable or semi-sustainable manner. As human populations within tropical forests expand, and demand for the accessories and necessities of modern life reaches formerly isolated areas, tropical forests will need to produce more goods and services for indigenous and colonizing peoples or risk conversion to timber and pasture. Examples from the Rio Orosa area of Amazonian Peru (Province of Loreto) are provided of both traditional and non-traditional forest uses that depend on the maintenance of forest canopy cover. An assessment

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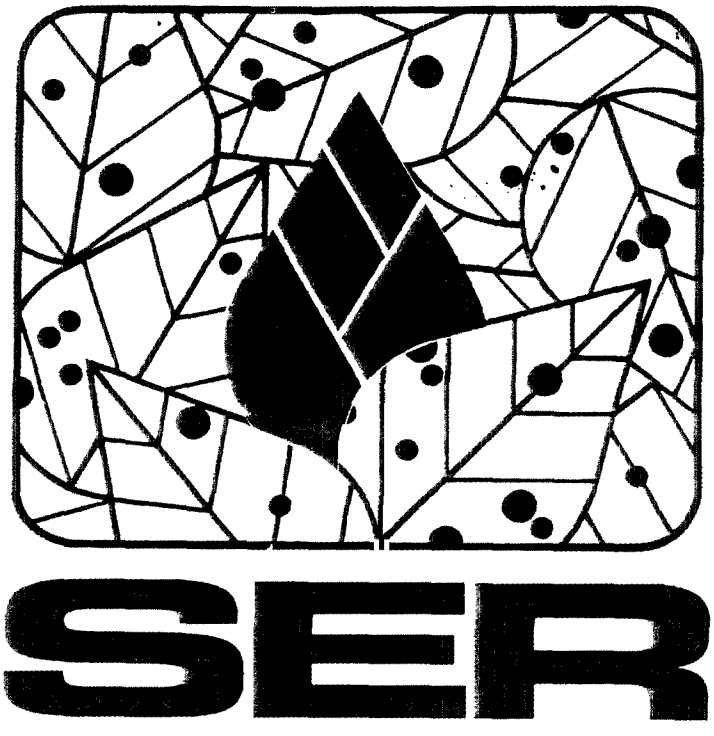

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